

# Magnet Project API Documentation

## Route Authentication & Role Protection Summary

Module	Route/Action	Public	Auth Required	Role(s) Required
Products	GET /api/products	No	Yes	Any authenticated user
	GET /api/products/:id	No	Yes	Any authenticated user
	POST /api/products/addProductsByBusiness	No	Yes	business
	POST /api/products/addProductsByMagnet_employee	No	Yes	magnet_employee, admin
	PUT /api/products/:id	No	Yes	business (own), admin, magnet_employee
	DELETE /api/products/:id	No	Yes	business (own), admin, magnet_employee
	PUT /api/products/:id/approve	No	Yes	admin, magnet_employee
	PUT /api/products/:id/decline	No	Yes	admin, magnet_employee
Categories	GET /api/categories	Yes	No	None
	POST /api/categories	No	Yes	business, admin, magnet_employee
	PUT /api/categories/:id	No	Yes	business (own), admin, magnet_employee
	DELETE /api/categories/:id	No	Yes	business (own), admin, magnet_employee
Orders	GET /api/orders/status-options	Yes	No	None
	POST /api/orders	No	Yes	customer
	GET /api/orders/my	No	Yes	customer
	GET /api/orders/business-products	No	Yes	business

Module	Route/Action	Public	Auth Required	Role(s) Required
	GET /api/orders/:id	No	Yes	admin, magnet_employee, customer (own)
	GET /api/orders	No	Yes	admin, magnet_employee
	PUT /api/orders/:id/status	No	Yes	admin, magnet_employee
Reviews	POST /api/reviews/products/:id/reviews	No	Yes	customer
	GET /api/reviews/products/:id/reviews	Yes	No	None
	GET /api/reviews/business-products-reviews	No	Yes	business
	DELETE /api/reviews/:id	No	Yes	admin, magnet_employee
Wishlist	GET /api/wishlist	No	Yes	customer
	POST /api/wishlist	No	Yes	customer
	DELETE /api/wishlist/:productId	No	Yes	customer
Address	GET /api/addresses	No	Yes	customer
	POST /api/addresses	No	Yes	customer
	PUT /api/addresses/:id	No	Yes	customer
	DELETE /api/addresses/:id	No	Yes	customer
User	GET /api/user/profile	No	Yes	customer
	PUT /api/user/profile	No	Yes	customer
	GET /api/user/business-requests	No	Yes	admin, magnet_employee
	POST /api/user/business-approval	No	Yes	admin, magnet_employee
	GET /api/user/business/:businessId	No	Yes	admin, magnet_employee
	GET /api/user/business-profile	No	Yes	business, admin, magnet_employee
Admin	POST /api/admin/users	No	Yes	admin
	GET /api/admin/users	No	Yes	admin
	GET /api/admin/users/stats	No	Yes	admin

Module	Route/Action	Public	Auth Required	Role(s) Required
	GET /api/admin/users/:id	No	Yes	admin
	PUT /api/admin/users/:id	No	Yes	admin
	DELETE /api/admin/users/:id	No	Yes	admin
	PUT /api/admin/users/:id/disallow	No	Yes	admin
	PUT /api/admin/users/:id/allow	No	Yes	admin
	PUT /api/admin/users/:id/verify-email	No	Yes	admin, magnet_employee
	PUT /api/admin/users/:id/unverify-email	No	Yes	admin, magnet_employee
	PUT /api/admin/users/:id/verify-phone	No	Yes	admin, magnet_employee
	PUT /api/admin/users/:id/unverify-phone	No	Yes	admin, magnet_employee
	GET /api/admin/wishlists	No	Yes	admin
	GET /api/admin/wishlists/:id	No	Yes	admin
	POST /api/admin/wishlists	No	Yes	admin
	PUT /api/admin/wishlists/:id	No	Yes	admin
	DELETE /api/admin/wishlists/:id	No	Yes	admin
	GET /api/admin/reviews	No	Yes	admin
	GET /api/admin/reviews/:id	No	Yes	admin
	POST /api/admin/reviews	No	Yes	admin
	PUT /api/admin/reviews/:id	No	Yes	admin
	PUT /api/admin/reviews/:id/reject	No	Yes	admin

|| DELETE /api/admin/reviews/:id | No | Yes | admin || | GET /api/admin/addresses | No | Yes | admin || | GET /api/admin/addresses/:id | No | Yes | admin || | POST /api/admin/addresses | No | Yes | admin || | PUT /api/admin/addresses/:id | No | Yes | admin || | DELETE /api/admin/addresses/:id | No | Yes | admin || | GET /api/admin/orders | No | Yes | admin || | GET /api/admin/orders/:id | No | Yes | admin || | POST /api/admin/orders | No | Yes | admin || | PUT /api/admin/orders/:id | No | Yes | admin || | DELETE /api/admin/orders/:id | No | Yes | admin || | Auth | Registration/Login/OTP | Yes | No | None || | Forgot Password | No | Yes | Any authenticated user |

Notes

- **Auth Required:** Requires a valid JWT token in the **Authorization** header.
  - **Role(s) Required:** Requires the user to have one of the listed roles. If "(own)" is specified, the user must own the resource (e.g., their own product or order).
  - **Public:** Anyone can access, no authentication required.
  - **All:** All HTTP methods (GET, POST, PUT, DELETE) for that endpoint.
  - **Business (if owns product in order):** Business user can access if any product in the order is owned by them (see order tracking section).
  - **Enhanced Data Population:** All APIs now return complete user information instead of just IDs for related fields (owner, approvedBy, createdBy, customer, user, etc.).
- 

## Message Format

All API responses return bilingual messages in both English and Arabic for every endpoint, including all errors and successes. The system uses a centralized messages.js file to ensure consistency across all modules (auth, user, product, order, address, category, review, wishlist, etc.).

Example:

```
{
  "status": "success",
  "message": {
    "en": "User registered successfully",
    "ar": "تم تسجيل المستخدم بنجاح"
  },
  "data": { ... }
}
```

---

## Enhanced User Data Population

All APIs now return complete user information instead of just IDs for related fields. This includes:

### User Object Format

When user data is populated, it returns:

```
{
  "id": "user_id",
  "firstname": "John",
  "lastname": "Doe",
  "email": "john@example.com",
  "role": "customer"
}
```

### Business User Object Format

For business users, additional company information is included:

```
{
  "id": "user_id",
  "firstname": "Business",
  "lastname": "Owner",
  "email": "business@example.com",
  "role": "business",
  "companyName": "ABC Company"
}
```

## Admin User Object Format

For admin users who approved content:

```
{
  "id": "admin_id",
  "firstname": "Admin",
  "lastname": "User",
  "email": "admin@example.com",
  "role": "admin"
}
```

## Populated Fields

The following fields are now populated with complete user objects instead of IDs:

- **Product Owner:** `product.owner` - Returns business user details
- **Product Approved By:** `product.approvedBy` - Returns admin/employee details
- **Category Created By:** `category.createdBy` - Returns creator details
- **Review User:** `review.user` - Returns reviewer details
- **Order Customer:** `order.customer` - Returns customer details
- **Address User:** `address.user` - Returns address owner details
- **Wishlist User:** `wishlist.user` - Returns wishlist owner details
- **Business Approved By:** `business.businessInfo.approvedBy` - Returns approver details

## Example Enhanced Responses

### Product Response

```
{
  "status": "success",
  "data": {
    "product": {
      "id": "product_id",
      "name": "Product Name",

```

```
    "code": "PROD001",
    "owner": {
      "id": "owner_id",
      "firstname": "Business",
      "lastname": "Owner",
      "email": "business@example.com",
      "companyName": "ABC Company"
    },
    "approvedBy": {
      "id": "admin_id",
      "firstname": "Admin",
      "lastname": "User",
      "email": "admin@example.com",
      "role": "admin"
    }
  }
}
```

## Review Response

```
{
  "status": "success",
  "data": {
    "review": {
      "id": "review_id",
      "rating": 5,
      "comment": "Great product!",
      "user": {
        "id": "user_id",
        "firstname": "John",
        "lastname": "Doe",
        "email": "john@example.com",
        "role": "customer"
      },
    },
    "product": {
      "id": "product_id",
      "name": "Product Name",
      "owner": {
        "id": "owner_id",
        "firstname": "Business",
        "lastname": "Owner",
        "email": "business@example.com",
        "companyName": "ABC Company"
      }
    }
  }
}
```

## Order Response

```
{
  "status": "success",
  "data": {
    "order": {
      "id": "order_id",
      "status": "pending",
      "customer": {
        "id": "customer_id",
        "firstname": "John",
        "lastname": "Doe",
        "email": "john@example.com",
        "role": "customer"
      },
    },
    "items": [
      {
        "product": {
          "id": "product_id",
          "name": "Product Name",
          "owner": {
            "id": "owner_id",
            "firstname": "Business",
            "lastname": "Owner",
            "email": "business@example.com",
            "companyName": "ABC Company"
          }
        },
        "quantity": 2
      }
    ]
  }
}
```

---

## Verification Rules

### Phone Number Verification

- **If phone number is provided:** Only the phone is verified (`isPhoneVerified = true`, `isEmailVerified = false`)
- **If no phone number is provided:** Only the email is verified (`isEmailVerified = true`, `isPhoneVerified = false`)

This applies to both customer and business registration.

---

## Validation Rules

## Email Validation

- **Format:** Must match email format: `^[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}$`
- **Required:** Email is required for all user registrations
- **Unique:** Email must be unique across all users

## Phone Validation

- **Format:** Must match phone format: `^\+?[1-9]\d{1,14}$`
- **Optional:** Phone number is optional for customer registration
- **Unique:** If provided, phone must be unique across all users
- **Saudi Numbers:** Saudi phone numbers are automatically verified

## Password Requirements

- **Minimum Length:** 8 characters
- **Complexity:** Must contain at least:
  - One uppercase letter (A-Z)
  - One lowercase letter (a-z)
  - One number (0-9)
- **Pattern:** `^(?=.*[a-z])(?=.*[A-Z])(?=.*\d)`

## Name Validation

- **First Name:** 2-50 characters, required
- **Last Name:** 2-50 characters, required
- **Trim:** Leading and trailing whitespace is automatically removed

## Business Registration Validation

- **CR Number:** 1-50 characters, required
- **VAT Number:** 1-50 characters, required
- **Company Name:** 2-100 characters, required
- **Company Type:** 2-100 characters, required
- **Country:** 2-50 characters, required
- **City:** 2-50 characters, required
- **District:** 2-50 characters, required
- **Street Name:** 2-100 characters, required

## Product Validation

- **Category:** Required bilingual object { en: "English Category", ar: "Arabic Category" }
- **Name:** Required bilingual object { en: "English Name", ar: "Arabic Name" }
- **Description:** Optional bilingual object { en: "English Description", ar: "Arabic Description" }
- **Unit:** Optional bilingual object { en: "English Unit", ar: "Arabic Unit" }
- **Custom Fields:** Array of objects, minimum 3, maximum 10
  - Each object must have **key** and **value** properties
  - Both key and value must be bilingual objects: { en: "English", ar: "Arabic" }



- **Code:** Optional, auto-generated if not provided
- **Images:** Optional array of strings (URLs)
- **Attachments:** Optional array of product IDs
- **Min Order:** Optional number
- **Price Per Unit:** Optional string
- **Stock:** Optional number

## Address Validation

- **Address Line 1:** Required string
- **Address Line 2:** Optional string
- **City:** Required string
- **State:** Required string
- **Postal Code:** Required string
- **Country:** Required string

## Category Validation

- **Name:** Required bilingual object { en: "English", ar: "Arabic" }
- **Description:** Optional bilingual object { en: "English", ar: "Arabic" }

## Review Validation

- **Rating:** Required number, min: 1, max: 5
- **Comment:** Optional string

## Admin User Management Validation

- **Role:** Must be one of: 'admin', 'magnet\_employee', 'business', 'customer'
- **Business Info:** Required for business users
  - **CR Number:** 1-50 characters, required for business users
  - **VAT Number:** 1-50 characters, required for business users
  - **Company Name:** 2-100 characters, required for business users
  - **Company Type:** 2-100 characters, required for business users
  - **City:** 2-50 characters, required for business users
  - **District:** 2-50 characters, required for business users
  - **Street Name:** 2-100 characters, required for business users
- **Disallow Reason:** Required when disallowing a user
- **Self-Protection:** Admins cannot disallow or delete their own accounts
- **Admin Protection:** Admin users cannot be disallowed by other admins

## Order Validation

- **Customer:** Required user ID
- **Items:** Required array of order items
  - Each item must have **product** (product ID) and **quantity** (number)
- **Shipping Address:** Required address ID
- **Status:** Optional, defaults to 'pending', enum: 'pending', 'confirmed', 'shipped', 'delivered', 'cancelled' (English values only, backend converts to bilingual)

- **Valid English Statuses:** ['pending', 'confirmed', 'shipped', 'delivered', 'cancelled']
  - **Valid Arabic Statuses:** ['قيد الانتظار', 'مؤكد', 'تم الشحن', 'تم التوصيل', 'ملغي']
  - **Validation:** Backend validates status using `Order.isValidStatus()` method
  - **Conversion:** Backend converts English status to bilingual using `Order.convertStatusToBilingual()` method
- 

## Auth Routes

### 1. Register User

- **POST** `/api/auth/register`
  - **Description:** Register a new customer user with automatic verification based on phone number presence.
  - **Body:**
    - `firstname` (string, required)
    - `lastname` (string, required)
    - `email` (string, required)
    - `phone` (string, optional)
    - `password` (string, required)
    - `country` (string, required)
    - `language` (string, optional, default: 'en')
  - **Verification Logic:**
    - If `phone` is provided: `isPhoneVerified = true, isEmailVerified = false`
    - If `phone` is not provided: `isEmailVerified = true, isPhoneVerified = false`
  - **Response:**
    - **201 Created:** User info + JWT token with verification status
- 

### 2. Register Business

- **POST** `/api/auth/business-register`
  - **Description:** Register a new business user (requires approval) with automatic verification based on phone number presence.
  - **Body:**
    - `firstname, lastname, email, password, crNumber, vatNumber, companyName, companyType, country, city, district, streetName, phone` (all required)
  - **Verification Logic:**
    - If `phone` is provided: `isPhoneVerified = true, isEmailVerified = false`
    - If `phone` is not provided: `isEmailVerified = true, isPhoneVerified = false`
  - **Response:**
    - **201 Created:** Business info (under review) with verification status
- 

### 3. Send Email OTP

- **POST** `/api/auth/send-email-otp`

- **Description:** Send an OTP to a new email (fails if email already exists).
  - **Body:**
    - **email** (string, required)
  - **Response:**
    - **200 OK:** Success message (bilingual)
- 

#### 4. Send Phone OTP

- **POST** /api/auth/send-phone-otp
  - **Description:** Send an OTP to a new phone (fails if phone already exists).
  - **Body:**
    - **phone** (string, required)
  - **Response:**
    - **200 OK:** Success message (bilingual)
- 

#### 5. Confirm OTP

- **POST** /api/auth/confirm-otp
  - **Description:** Confirm an OTP for any email or phone identifier (works for both registered and non-registered users).
  - **Body:**
    - **identifier** (string, required)
    - **otp** (string, required)
  - **Response:**
    - **200 OK:** OTP verified successfully (bilingual message)
- 

#### 6. Confirm Login OTP

- **POST** /api/auth/confirm-login-otp
  - **Description:** Confirm an OTP for registered users and return user data with JWT token (like login API).
  - **Body:**
    - **identifier** (string, required)
    - **otp** (string, required)
  - **Response:**
    - **200 OK:** User info + JWT token (bilingual message)
    - **404 Not Found:** User not found (bilingual message)
- 

#### 7. Login

- **POST** /api/auth/login
- **Description:** Login with email/phone and password.
- **Body:**
  - **identifier** (email or phone, required)
  - **password** (string, required)
- **Response:**

- **200 OK:** User info + JWT token (bilingual message)
- 

## 8. Login with OTP

- **POST** `/api/auth/login-with-otp`
  - **Description:** Request an OTP for login (email or phone).
  - **Body:**
    - `identifier` (email or phone, required)
  - **Response:**
    - **200 OK:** OTP sent (bilingual message)
- 

## 9. Forgot Password

- **POST** `/api/auth/forgot-password`
  - **Description:** Change password for authenticated user.
  - **Headers:** `Authorization: Bearer <token>`
  - **Body:**
    - `newPassword` (string, required)
  - **Response:**
    - **200 OK:** Password updated (bilingual message)
- 

## 10. Create Admin User

- **POST** `/api/auth/create-admin`
  - **Description:** Create a new admin user. Only accessible by authenticated admin users.
  - **Headers:** `Authorization: Bearer <token>`
  - **Body:**
    - `firstname` (string, required)
    - `lastname` (string, required)
    - `email` (string, required)
    - `phone` (string, optional)
    - `password` (string, required)
    - `country` (string, required)
    - `language` (string, optional, default: 'en')
  - **Response:**
    - **201 Created:** Admin user info (bilingual message)
    - **403 Forbidden:** Insufficient permissions (bilingual message)
    - **400 Bad Request:** Email/phone already registered (bilingual message)
- 

## 11. Create Magnet Employee User

- **POST** `/api/auth/create-magnet-employee`
- **Description:** Create a new magnet employee user. Only accessible by authenticated admin users.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**

- **firstname** (string, required)
  - **lastname** (string, required)
  - **email** (string, required)
  - **phone** (string, optional)
  - **password** (string, required)
  - **country** (string, required)
  - **language** (string, optional, default: 'en')
  - **Response:**
    - **201 Created:** Magnet employee user info (bilingual message)
    - **403 Forbidden:** Insufficient permissions (bilingual message)
    - **400 Bad Request:** Email/phone already registered (bilingual message)
- 

## Product Routes

### Language Support

Products support bilingual content (Arabic and English). You can:

- **Get products in specific language:** Add **?lang=en** or **?lang=ar** to the URL
- **Get products in user's preferred language:** The system uses the user's language preference
- **Get full bilingual data:** Use **?lang=both** to get both languages

### 1. Get Products

- **GET** **/api/products**
- **GET** **/api/products?lang=en** (English only)
- **GET** **/api/products?lang=ar** (Arabic only)
- **GET** **/api/products?lang=both** (Both languages)
- **Description:** Get all approved products with pagination and filtering (requires authentication).  
Admin/magnet\_employee can see all products.
- **Headers:** **Authorization:** **Bearer <token>**
- **Query Parameters:**
  - **page** (number, optional, default: 1) - Page number for pagination
  - **limit** (number, optional, default: 10) - Number of items per page
  - **category** (string, optional) - Filter by category (searches in English category name)
  - **search** (string, optional) - Search by product name (English/Arabic), code, or owner company name
  - **status** (string, optional) - Filter by status: 'pending', 'approved', 'declined' (admin/business/magnet\_employee only)
- **Response:**
  - **200 OK:** List of products with pagination info
- **Product Object:**
  - **code** (string, auto-generated if not provided, e.g. "A001")
  - **category** (object, required, bilingual: { **en**: "English Category", **ar**: "Arabic Category" })
  - **name** (object, required, bilingual: { **en**: "English Name", **ar**: "Arabic Name" })
  - **images** (array of strings)

- **description** (object, optional, bilingual: { en: "English Description", ar: "Arabic Description" })
- **attachments** (array of product IDs, references to other products)
- **unit** (object, optional, bilingual: { en: "English Unit", ar: "Arabic Unit" })
- **minOrder** (number)
- **pricePerUnit** (string)
- **stock** (number)
- **customFields** (array of objects, min 3, max 10, each: { key: { en: "English Key", ar: "Arabic Key" }, value: { en: "English Value", ar: "Arabic Value" } })
- **status** (string: 'pending', 'approved', 'declined')
- **owner** (object, populated with business user details)
- **approvedBy** (object, populated with admin/employee details who approved)
- **createdAt** (date)

- **Example Response:**

```
{
  "status": "success",
  "data": {
    "products": [
      {
        "id": "product_id",
        "code": "A001",
        "name": { "en": "Product Name", "ar": "اسم المنتج" },
        "category": { "en": "Electronics", "ar": "إلكترونيات" },
        "status": "approved",
        "owner": {
          "id": "owner_id",
          "email": "business@example.com",
          "businessInfo": { "companyName": "ABC Company" }
        }
      }
    ]
  },
  "pagination": {
    "currentPage": 1,
    "totalPages": 5,
    "totalItems": 50,
    "itemsPerPage": 10
  }
}
```

---

## 1a. Get Product by ID

- **GET** /api/products/:id
- **GET** /api/products/:id?lang=en (English only)
- **GET** /api/products/:id?lang=ar (Arabic only)
- **GET** /api/products/:id?lang=both (Both languages)

- **Description:** Get a single product by its ID. Requires authentication. Admin, business, and magnet\_employee can access any product (including pending/declined).
  - **Headers:** `Authorization: Bearer <token>`
  - **Response:**
    - `200 OK`: Product object (see above)
    - `404 Not Found`: If product does not exist
    - `403 Forbidden`: If trying to access a non-approved product without proper role
- 

## 2. Add Product (Business)

- **POST** `/api/products/addProductsByBusiness`
  - **Description:** Business user adds a new product (pending approval). Product code is auto-generated if not provided.
  - **Headers:** `Authorization: Bearer <token>`
  - **Body:**
    - `category` (object, required, bilingual: { `en`: "English Category", `ar`: "Arabic Category" })
    - `name` (object, required, bilingual: { `en`: "English Name", `ar`: "Arabic Name" })
    - `images` (array of strings, optional)
    - `attachments` (array of product IDs, references to other products, optional)
    - `description` (object, optional, bilingual: { `en`: "English Description", `ar`: "Arabic Description" })
    - `unit` (object, optional, bilingual: { `en`: "English Unit", `ar`: "Arabic Unit" })
    - `minOrder`, `pricePerUnit`, `stock` (all optional)
    - `customFields` (array of objects, min 3, max 10, each: { `key`: { `en`: "English Key", `ar`: "Arabic Key" }, `value`: { `en`: "English Value", `ar`: "Arabic Value" } }, required)
  - **Response:**
    - `201 Created`: Product info (pending approval) with bilingual message
- 

## 3. Add Product (Admin/Magnet Employee)

- **POST** `/api/products/addProductsByMagnet_employee`
- **Description:** Admin or magnet employee adds a new product (approved immediately). Product code is auto-generated if not provided.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `category` (object, required, bilingual: { `en`: "English Category", `ar`: "Arabic Category" })
  - `name` (object, required, bilingual: { `en`: "English Name", `ar`: "Arabic Name" })
  - `images` (array of strings, optional)
  - `attachments` (array of product IDs, references to other products, optional)
  - `description` (object, optional, bilingual: { `en`: "English Description", `ar`: "Arabic Description" })
  - `unit` (object, optional, bilingual: { `en`: "English Unit", `ar`: "Arabic Unit" })
  - `minOrder`, `pricePerUnit`, `stock` (all optional)

- **customFields** (array of objects, min 3, max 10, each: { **key**: { **en**: "English Key", **ar**: "Arabic Key" }, **value**: { **en**: "English Value", **ar**: "Arabic Value" } }, required)
  - **owner** (user id, required)
  - **Response:**
    - **201 Created:** Product info (approved) with bilingual message
- 

#### 4. Update Product

- **PUT** `/api/products/:id`
  - **Description:** Business user updates their own product (pending approval). Admin/magnet\_employee can update and approve/decline.
  - **Headers:** **Authorization:** **Bearer** `<token>`
  - **Body:**
    - Any product field (see above)
    - **status** (optional, only admin/magnet\_employee can set to 'approved' or 'declined')
  - **Response:**
    - **200 OK:** Updated product info with bilingual message
- 

#### 5. Delete Product

- **DELETE** `/api/products/:id`
  - **Description:** Business user deletes their own product, or admin/employee deletes any product.
  - **Headers:** **Authorization:** **Bearer** `<token>`
  - **Response:**
    - **200 OK:** Product deleted with bilingual message
- 

#### 6. Approve Product

- **PUT** `/api/products/:id/approve`
  - **Description:** Admin/magnet\_employee approves a product.
  - **Headers:** **Authorization:** **Bearer** `<token>`
  - **Response:**
    - **200 OK:** Product approved with bilingual message
- 

#### 7. Decline Product

- **PUT** `/api/products/:id/decline`
  - **Description:** Admin/magnet\_employee declines a product.
  - **Headers:** **Authorization:** **Bearer** `<token>`
  - **Response:**
    - **200 OK:** Product declined with bilingual message
- 

## Real-Time Order Tracking (WebSocket)

### Overview



- The API supports real-time order status updates using WebSocket (Socket.IO).
- Clients can subscribe to updates for specific orders and receive instant notifications when the order status changes (e.g., confirmed, shipped, delivered).

## How It Works

1. **Client authenticates with a JWT token when connecting to the WebSocket.**
2. **Client joins a room for a specific order using the order ID.**
3. **When the order status changes, the server emits an `orderStatusUpdate` event to all clients in that room.**

## WebSocket Connection (Socket.IO)

- **URL:** `ws://<your-server>:5000` (or `wss://` for HTTPS)
- **Library:** `socket.io-client`

## Client Example (JavaScript/React):

```
import { io } from 'socket.io-client';
const socket = io('http://localhost:5000', {
  auth: { token: '<JWT_TOKEN>' }
});

// Join the order room
socket.emit('joinOrderRoom', '<ORDER_ID>');

// Listen for updates
socket.on('orderStatusUpdate', (data) => {
  // data: { orderId, status, statusLog, updatedAt }
  console.log('Order update:', data);
});
```

## Order Room Access Rules

- **Admin & magnet\_employee:** Can track any order.
- **Business:** Can track orders that include products they own.
- **Customer:** Can track only their own orders.
- Unauthorized attempts to join order rooms will be ignored.

## Server-Side Security

- The server authenticates each socket connection using the JWT token.
- The server enforces the above access rules for joining order rooms.

## Order Status Update Event

- **Event:** `orderStatusUpdate`
- **Payload:**

```
{
  "orderId": "...",
  "status": "shipped",
  "statusLog": [
    { "status": "pending", "timestamp": "..." },
    { "status": "confirmed", "timestamp": "..." },
    { "status": "shipped", "timestamp": "..." }
  ],
  "updatedAt": "2024-07-10T12:00:00.000Z"
}
```

## Security Notes

- Clients must provide a valid JWT token when connecting.
- The server will only allow joining order rooms for orders the user is authorized to track (see access rules above).
- Unauthorized attempts to join rooms will be ignored.

---

## Additional Utility Features

### Email and SMS Utilities

The API includes comprehensive email and SMS functionality for user verification and notifications:

#### Email Features

- **Email OTP Generation:** Automatic generation of 6-digit verification codes
- **Email Templates:** Pre-formatted HTML email templates for various notifications
- **Business Notifications:** Automatic email notifications for business registration status changes
- **Verification Emails:** Email verification for user registration

#### SMS Features

- **SMS OTP Generation:** Automatic generation of 6-digit SMS verification codes
- **Saudi Number Support:** Special handling for Saudi phone numbers (+966)
- **SMS Templates:** Pre-formatted SMS messages for various notifications
- **Phone Verification:** SMS verification for user registration

### Product Code Generation

The API includes an automatic product code generation system:

#### Features

- **Auto-Generation:** If no product code is provided, the system automatically generates a unique code
- **Format:** Codes follow the pattern "A001", "A002", etc.
- **Uniqueness:** Each generated code is guaranteed to be unique

- **Custom Codes:** Users can provide their own custom codes if desired

## User Model Features

The user model includes several advanced features:

### Favorites System

- **Add to Favorites:** Users can add products to their favorites list
- **Remove from Favorites:** Users can remove products from their favorites
- **View Favorites:** Users can view their complete favorites list

### Cart System

- **Add to Cart:** Users can add products to their shopping cart
- **Cart Management:** Users can update quantities and remove items
- **Cart Persistence:** Cart data is stored with the user account

### Business Approval Workflow

- **Registration Review:** Business registrations require admin/employee approval
- **Status Tracking:** Business approval status is tracked (pending, approved, rejected)
- **Notification System:** Automatic notifications for approval status changes
- **Rejection Reasons:** Admins can provide reasons for business registration rejections

### Verification Status Tracking

- **Email Verification:** Track whether user's email is verified
- **Phone Verification:** Track whether user's phone is verified
- **Automatic Verification:** Saudi phone numbers are automatically verified
- **Manual Verification:** Other verification methods available

### User Disallowance System

- **Account Disallowance:** Admins can disallow users from logging in and performing actions
- **Disallowance Tracking:** Track who disallowed a user, when, and the reason
- **Allowance Tracking:** Track who allowed a user and when
- **Login Prevention:** Disallowed users cannot login or perform any actions
- **Business Action Prevention:** Disallowed business users cannot add products
- **Self-Protection:** Admins cannot disallow their own accounts
- **Admin Protection:** Admin users cannot be disallowed by other admins

## Bilingual Message System

The API includes a comprehensive bilingual message system:

### Features

- **Centralized Messages:** All messages are stored in a centralized `messages.js` file

- **Bilingual Support:** All messages are available in both English and Arabic
- **Consistent Format:** All API responses follow the same bilingual format
- **Error Messages:** Comprehensive error messages in both languages
- **Success Messages:** Success confirmations in both languages

## Message Format

```
{
  "status": "success",
  "message": {
    "en": "Operation completed successfully",
    "ar": "تم إكمال العملية بنجاح"
  },
  "data": { ... }
}
```

## Authentication and Authorization

The API includes a robust authentication and authorization system:

### JWT Authentication

- **Token-Based:** Uses JWT tokens for authentication
- **Expiration:** Tokens expire after 7 days
- **Refresh:** Tokens can be refreshed
- **Secure:** Uses environment variables for secret keys

### Role-Based Access Control

- **Admin:** Full system access including user management
- **Magnet Employee:** Limited admin access
- **Business:** Business-specific features
- **Customer:** Customer-specific features

### Admin User Management

- **User Creation:** Admins can create any type of user (customer, business, magnet\_employee, admin)
- **User Management:** Complete CRUD operations on all users
- **User Statistics:** Comprehensive user statistics and analytics
- **User Disallowance:** Ability to disallow users from accessing the system
- **User Allowance:** Ability to re-allow previously disallowed users
- **Audit Trail:** Complete tracking of disallowance/allowance actions
- **Security Protections:** Self-protection and admin protection mechanisms

### Middleware System

- **Auth Middleware:** Verifies JWT tokens

- **Role Middleware:** Enforces role-based access
  - **Validation Middleware:** Validates request data
  - **Error Handling:** Comprehensive error handling
- 

## Category Routes

### Language Support

Categories support bilingual content (Arabic and English). You can:

- **Get categories in specific language:** Add `?lang=en` or `?lang=ar` to the URL
- **Get categories in user's preferred language:** The system uses the user's language preference
- **Get full bilingual data:** Use `?lang=both` to get both languages

### Category Object

- `name` (object, required, bilingual: { `en`: "English Name", `ar`: "Arabic Name" })
- `description` (object, optional, bilingual: { `en`: "English Description", `ar`: "Arabic Description" })
- `createdBy` (object, populated with creator details)
- `createdAt` (date)
- `updatedAt` (date)

### 1. Get Categories

- **GET** `/api/categories`
- **GET** `/api/categories?lang=en` (English only)
- **GET** `/api/categories?lang=ar` (Arabic only)
- **GET** `/api/categories?lang=both` (Both languages)
- **Description:** Get all categories (public).
- **Response:**
  - **200 OK:** List of categories

### 2. Create Category

- **POST** `/api/categories`
- **Description:** Create a new category (business, admin, or magnet\_employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `name` (object, required, bilingual: { `en`: "English Name", `ar`: "Arabic Name" })
  - `description` (object, optional, bilingual: { `en`: "English Description", `ar`: "Arabic Description" })
- **Response:**
  - **201 Created:** Category info (bilingual message)

### 3. Update Category

- **PUT** `/api/categories/:id`
- **Description:** Update a category (business, admin, or magnet\_employee only).

- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `name` (object, optional, bilingual: { `en`: "English Name", `ar`: "Arabic Name" })
  - `description` (object, optional, bilingual: { `en`: "English Description", `ar`: "Arabic Description" })
- **Response:**
  - `200 OK`: Updated category info (bilingual message)

#### 4. Delete Category

- **DELETE** `/api/categories/:id`
- **Description:** Delete a category (business, admin, or magnet\_employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - `200 OK`: Category deleted (bilingual message)

## Order Routes

### Language Support

Orders support bilingual content (Arabic and English). You can:

- **Get orders in specific language:** Add `?lang=en` or `?lang=ar` to the URL
- **Get orders in user's preferred language:** The system uses the user's language preference
- **Get full bilingual data:** Use `?lang=both` to get both languages

### Order Object

- `customer` (object, populated with customer details)
- `items` (array of objects, required)
  - Each item: { `product`: `ObjectId`, `quantity`: `Number` }
- `shippingAddress` (`ObjectId`, reference to Address)
- `status` (object, bilingual: { `en`: "pending", `ar`: " قيد الانتظار" })
- `statusLog` (array of objects)
  - Each log: { `status`: { `en`: "pending", `ar`: " قيد الانتظار" }, `timestamp`: `Date` }
- `createdAt` (date)
- `updatedAt` (date)

**Note:** Order status is stored as bilingual objects but returned as localized strings based on the `lang` parameter:

- `pending` → { `en`: "pending", `ar`: " قيد الانتظار" }
- `confirmed` → { `en`: "confirmed", `ar`: "مؤكد" }
- `shipped` → { `en`: "shipped", `ar`: "تم الشحن" }
- `delivered` → { `en`: "delivered", `ar`: "تم التوصيل" }
- `cancelled` → { `en`: "cancelled", `ar`: "ملغي" }

#### 1. Create Order

- **POST** /api/orders
- **Description:** Create a new order (customer only).
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - Order details (see order model)
- **Response:**
  - 201 Created: Order info (bilingual message)

## 2. Get My Orders

- **GET** /api/orders/my
- **GET** /api/orders/my?lang=en (English only)
- **GET** /api/orders/my?lang=ar (Arabic only)
- **GET** /api/orders/my?lang=both (Both languages)
- **Description:** Get all orders for the authenticated customer.
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - 200 OK: List of orders (bilingual message)

## 3. Get Order by ID

- **GET** /api/orders/:id
- **GET** /api/orders/:id?lang=en (English only)
- **GET** /api/orders/:id?lang=ar (Arabic only)
- **GET** /api/orders/:id?lang=both (Both languages)
- **Description:** Get order by ID (admin, magnet\_employee, or owner).
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - 200 OK: Order info (bilingual message)

## 4. Get All Orders

- **GET** /api/orders
- **GET** /api/orders?lang=en (English only)
- **GET** /api/orders?lang=ar (Arabic only)
- **GET** /api/orders?lang=both (Both languages)
- **Description:** Get all orders (admin, magnet\_employee only).
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - 200 OK: List of orders (bilingual message)

## 5. Update Order Status

- **PUT** /api/orders/:id/status
- **Description:** Update order status (admin, magnet\_employee only).
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - status (string, required, enum: 'pending', 'confirmed', 'shipped', 'delivered', 'cancelled')

- **Response:**
  - **200 OK:** Updated order info (bilingual message)

## 6. Get Status Options

- **GET** `/api/orders/status-options`
- **GET** `/api/orders/status-options?lang=en` (English only)
- **GET** `/api/orders/status-options?lang=ar` (Arabic only)
- **GET** `/api/orders/status-options?lang=both` (Both languages)
- **Description:** Get available order status options (public).
- **Response:**
  - **200 OK:** Status options in requested language
  - **Example Response:**

```
{
  "status": "success",
  "data": {
    "statusOptions": {
      "pending": " قيد الانتظار",
      "confirmed": "مؤكد",
      "shipped": "تم الشحن",
      "delivered": "تم التوصيل",
      "cancelled": "ملغي"
    },
    "statusEnums": {
      "en": ["pending", "confirmed", "shipped", "delivered",
"cancelled"],
      "ar": ["قيد الانتظار", "مؤكد", "تم الشحن", "تم التوصيل",
"ملغي"]
    },
    "validEnglishStatuses": ["pending", "confirmed", "shipped",
"delivered", "cancelled"]
  }
}
```

## 7. Get Business Product Orders

- **GET** `/api/orders/business-products`
- **Description:** Get all orders containing products owned by the authenticated business user.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** List of orders containing the business user's products
  - **Note:** This endpoint returns orders that contain any product owned by the business user, with customer details for order fulfillment.

---

## Address Routes

### Language Support



Addresses no longer support bilingual content. All address fields are stored as simple strings.

## Address Object

- **user** (object, populated with user details)
- **addressLine1** (string, required)
- **addressLine2** (string, optional)
- **city** (string, required)
- **state** (string, required)
- **postalCode** (string, required)
- **country** (string, required)
- **createdAt** (date)
- **updatedAt** (date)

### 1. Get Addresses

- **GET** /api/addresses
- **Description:** Get all addresses for the authenticated customer.
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - **200 OK:** List of addresses (bilingual message)

### 2. Add Address

- **POST** /api/addresses
- **Description:** Add a new address (customer only).
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **addressLine1** (string, required)
  - **addressLine2** (string, optional)
  - **city** (string, required)
  - **state** (string, required)
  - **postalCode** (string, required)
  - **country** (string, required)
- **Response:**
  - **201 Created:** Address info (bilingual message)

### 3. Update Address

- **PUT** /api/addresses/:id
- **Description:** Update an address (customer only).
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - Any address field (see above)
- **Response:**
  - **200 OK:** Updated address info (bilingual message)

## 4. Delete Address

- **DELETE** `/api/addresses/:id`
  - **Description:** Delete an address (customer only).
  - **Headers:** `Authorization: Bearer <token>`
  - **Response:**
    - `200 OK`: Address deleted (bilingual message)
- 

## Wishlist Routes

### Wishlist Object

- `user` (object, populated with wishlist owner details)
- `products` (array of objects, populated with product details including owner and approvedBy)
- `createdAt` (date)

### 1. Get Wishlist

- **GET** `/api/wishlist`
- **Description:** Get the authenticated customer's wishlist.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - `200 OK`: List of wishlist items (bilingual message)

### 2. Add to Wishlist

- **POST** `/api/wishlist`
- **Description:** Add a product to the authenticated customer's wishlist.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `productId` (string, required)
- **Response:**
  - `200 OK`: Wishlist item info (bilingual message)

### 3. Remove from Wishlist

- **DELETE** `/api/wishlist/:productId`
  - **Description:** Remove a product from the authenticated customer's wishlist.
  - **Headers:** `Authorization: Bearer <token>`
  - **Response:**
    - `200 OK`: Wishlist item removed (bilingual message)
- 

## Review Routes

### Language Support

Reviews no longer support bilingual content. All review comments are stored as simple strings.

## Review Object

- **product** (object, populated with product details including owner and approvedBy)
- **user** (object, populated with reviewer details)
- **rating** (number, required, min: 1, max: 5)
- **comment** (string, optional)
- **status** (string, enum: 'accept', 'reject', default: 'accept')
- **rejectedBy** (object, populated with admin details who rejected, only if status is 'reject')
- **rejectedAt** (date, only if status is 'reject')
- **rejectionReason** (string, only if status is 'reject')
- **createdAt** (date)

### 1. Add Review

- **POST** `/api/reviews/products/:id/reviews`
- **Description:** Add a review to a product (customer only).
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - **rating** (number, required, min: 1, max: 5)
  - **comment** (string, optional)
- **Response:**
  - **201 Created:** Review info (bilingual message)

### 2. Get Product Reviews

- **GET** `/api/reviews/products/:id/reviews`
- **Description:** Get all reviews for a product (public).
- **Response:**
  - **200 OK:** List of reviews (bilingual message)

### 3. Get Business Products Reviews

- **GET** `/api/reviews/business-products-reviews`
- **Description:** Get all reviews for products owned by the authenticated business user.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** List of reviews for the business user's products
  - **Note:** This endpoint returns reviews for all products owned by the business user, with user and product details.

### 4. Delete Review

- **DELETE** `/api/reviews/:id`
- **Description:** Delete a review (admin or magnet\_employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Review deleted (bilingual message)

---

## User Routes

### 1. Get User Profile

- **GET** `/api/user/profile`
- **Description:** Get the authenticated user's profile.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** User profile info (bilingual message)

### 2. Update User Profile

- **PUT** `/api/user/profile`
- **Description:** Update the authenticated user's profile.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `firstname` (string, optional)
  - `lastname` (string, optional)
  - `email` (string, optional)
  - `phone` (string, optional)
  - `country` (string, optional)
  - `language` (string, optional)
- **Response:**
  - **200 OK:** Updated user profile (bilingual message)

### 3. Get Business Requests

- **GET** `/api/user/business-requests`
- **Description:** Get all business registration requests (admin/employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** List of business requests (bilingual message)

### 4. Business Approval

- **POST** `/api/user/business-approval`
- **Description:** Approve or reject business registration (admin/employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `businessId` (string, required)
  - `status` (string, required, enum: 'approved', 'rejected')
  - `reason` (string, optional, required if status is 'rejected')
- **Response:**
  - **200 OK:** Business approval status updated (bilingual message)

### 5. Get Business Details

- **GET** `/api/user/business/:businessId`

- **Description:** Get business details by ID (admin/employee only).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - `200 OK`: Business details (bilingual message)

## 6. Get Business Profile

- **GET** `/api/user/business-profile`
- **Description:** Get business profile (business users only).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - `200 OK`: Business profile info (bilingual message)

---

# Admin Routes

## Overview

Admin routes provide comprehensive user management functionality for system administrators. All admin endpoints require authentication and admin role authorization.

### Key Features:

- **User Management:** Create, read, update, delete users (admin only)
- **User Status Control:** Allow/disallow users from accessing the system (admin only)
- **Verification Management:** Manually verify/unverify user email and phone numbers (admin or magnet\_employee)
- **Business Approval:** Manage business user approvals and rejections
- **Statistics:** Get comprehensive user statistics for dashboard
- **Role-based Access:** Support for all user roles (customer, business, magnet\_employee, admin)
- **Enhanced Data:** All APIs return complete user information with populated related fields

## 1. Create User

- **POST** `/api/admin/users`
- **Description:** Create any type of user (customer, business, magnet\_employee, admin).
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `firstname` (string, required)
  - `lastname` (string, required)
  - `email` (string, required)
  - `phone` (string, optional)
  - `password` (string, required)
  - `role` (string, required, enum: 'customer', 'business', 'magnet\_employee', 'admin')
  - `country` (string, required)
  - `language` (string, optional, default: 'en')
  - `imageUrl` (string, optional) - Profile image URL
  - `businessInfo` (object, required if role is 'business')
    - `crNumber` (string, required for business)

- **vatNumber** (string, required for business)
- **companyName** (string, required for business)
- **companyType** (string, required for business)
- **city** (string, required for business)
- **district** (string, required for business)
- **streetName** (string, required for business)
- **Response:**
  - **201 Created:** User created successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)
  - **403 Forbidden:** Insufficient permissions (bilingual message)

## 2. Get All Users

- **GET** /api/admin/users
- **Description:** Get all users with pagination, filtering, and search capabilities. Automatically fixes missing **approvedBy** field for approved business users.
- **Headers:** **Authorization:** Bearer <token>
- **Query Parameters:**
  - **page** (number, optional, default: 1)
  - **limit** (number, optional, default: 10)
  - **role** (string, optional, filter by role)
  - **search** (string, optional, search by name, email, or phone)
  - **status** (string, optional, filter by disallow status: 'allowed', 'disallowed')
- **Response:**
  - **200 OK:** List of users with pagination info (bilingual message)

## 3. Get User Statistics

- **GET** /api/admin/users/stats
- **Description:** Get comprehensive user statistics for the admin dashboard.
- **Headers:** **Authorization:** Bearer <token>
- **Response:**
  - **200 OK:** User statistics including counts by role, verification status, etc. (bilingual message)

## 4. Get User by ID

- **GET** /api/admin/users/:id
- **Description:** Get detailed information about a specific user. Automatically fixes missing **approvedBy** field for approved business users. For business users, returns products and their reviews. For customer users, returns orders, wishlist, addresses, and reviews. All products include their first image URL.
- **Headers:** **Authorization:** Bearer <token>
- **Response:**
  - **200 OK:** User details with role-specific data (bilingual message)
  - **404 Not Found:** User not found (bilingual message)
- **Business User Response:**
  - **products:** Array of products with **imageUrl** (first image from product's images array)
  - **reviews:** Array of reviews with product details including **imageUrl**
- **Customer User Response:**

- **orders**: Array of orders with product details including **imageUrl**
- **wishlist**: Wishlist with products including **imageUrl**
- **addresses**: Array of addresses
- **reviews**: Array of reviews with product details including **imageUrl**
- **Admin/Magnet Employee User Response:**
  - **moderatedProducts**: Array of products approved/declined by this admin/employee with owner details and **imageUrl**
  - **rejectedReviews**: Array of reviews rejected by this admin/employee with user and product details including **imageUrl**
  - **moderatedOrders**: Array of orders where this admin/employee made status changes (confirmed, shipped, cancelled, etc.)
  - **approvedBusinessUsers**: Array of business users approved by this admin/employee with complete business information
- **Product Object in Responses:**
  - **id**: Product ID
  - **name**: Product name (bilingual object)
  - **code**: Product code
  - **status**: Product status
  - **category**: Product category (bilingual object)
  - **imageUrl**: First image URL from product's images array (null if no images)

## 5. Update User

- **PUT** `/api/admin/users/:id`
- **Description:** Update user information (cannot update own account).
- **Headers:** **Authorization:** **Bearer** `<token>`
- **Body:**
  - **firstname** (string, optional)
  - **lastname** (string, optional)
  - **email** (string, optional)
  - **phone** (string, optional)
  - **password** (string, optional)
  - **role** (string, optional, enum: 'customer', 'business', 'magnet\_employee', 'admin')
  - **country** (string, optional)
  - **language** (string, optional)
  - **imageUrl** (string, optional) - Profile image URL
  - **isEmailVerified** (boolean, optional)
  - **isPhoneVerified** (boolean, optional)
  - **isDisallowed** (boolean, optional)
  - **businessInfo** (object, optional for business users)
    - **crNumber** (string, optional)
    - **vatNumber** (string, optional)
    - **companyName** (string, optional)
    - **companyType** (string, optional)
    - **city** (string, optional)
    - **district** (string, optional)
    - **streetName** (string, optional)

- **Response:**
  - **200 OK:** User updated successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)
  - **404 Not Found:** User not found (bilingual message)

## 6. Delete User

- **DELETE** `/api/admin/users/:id`
- **Description:** Permanently delete a user (cannot delete own account).
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** User deleted successfully (bilingual message)
  - **400 Bad Request:** Cannot delete own account (bilingual message)
  - **404 Not Found:** User not found (bilingual message)

## 7. Disallow User

- **PUT** `/api/admin/users/:id/disallow`
- **Description:** Disallow a user from logging in and performing actions.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - **reason** (string, required) - Reason for disallowing the user
- **Response:**
  - **200 OK:** User disallowed successfully (bilingual message)
  - **400 Bad Request:** Cannot disallow admin or own account (bilingual message)
  - **404 Not Found:** User not found (bilingual message)

## 8. Allow User

- **PUT** `/api/admin/users/:id/allow`
- **Description:** Allow a previously disallowed user to login and perform actions.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** User allowed successfully (bilingual message)
  - **400 Bad Request:** User is not disallowed (bilingual message)
  - **404 Not Found:** User not found (bilingual message)

## 9. Verify User Email

- **PUT** `/api/admin/users/:id/verify-email`
- **Description:** Manually verify a user's email address.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Email verified successfully (bilingual message)
  - **400 Bad Request:** Email is already verified (bilingual message)
  - **404 Not Found:** User not found (bilingual message)
- **Example Response:**



```
{
  "status": "success",
  "data": {
    "user": {
      "id": "user_id",
      "firstname": "John",
      "lastname": "Doe",
      "email": "john@example.com",
      "isEmailVerified": true,
      "isPhoneVerified": false
    }
  },
  "message": {
    "en": "Email verified successfully",
    "ar": "تم التحقق من البريد الإلكتروني بنجاح"
  }
}
```

## 10. Unverify User Email

- **PUT** /api/admin/users/:id/unverify-email
- **Description:** Manually unverify a user's email address.
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - **200 OK:** Email unverified successfully (bilingual message)
  - **400 Bad Request:** Email is not verified (bilingual message)
  - **404 Not Found:** User not found (bilingual message)
- **Example Response:**

```
{
  "status": "success",
  "data": {
    "user": {
      "id": "user_id",
      "firstname": "John",
      "lastname": "Doe",
      "email": "john@example.com",
      "isEmailVerified": false,
      "isPhoneVerified": false
    }
  },
  "message": {
    "en": "Email unverified successfully",
    "ar": "تم إلغاء التحقق من البريد الإلكتروني بنجاح"
  }
}
```

## 11. Verify User Phone

- **PUT** `/api/admin/users/:id/verify-phone`
- **Description:** Manually verify a user's phone number.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Phone verified successfully (bilingual message)
  - **400 Bad Request:** Phone is already verified or user has no phone (bilingual message)
  - **404 Not Found:** User not found (bilingual message)
- **Example Response:**

```
{
  "status": "success",
  "data": {
    "user": {
      "id": "user_id",
      "firstname": "John",
      "lastname": "Doe",
      "phone": "+1234567890",
      "isEmailVerified": true,
      "isPhoneVerified": true
    }
  },
  "message": {
    "en": "Phone verified successfully",
    "ar": "تم التحقق من الهاتف بنجاح"
  }
}
```

## 12. Unverify User Phone

- **PUT** `/api/admin/users/:id/unverify-phone`
- **Description:** Manually unverify a user's phone number.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Phone unverified successfully (bilingual message)
  - **400 Bad Request:** Phone is not verified (bilingual message)
  - **404 Not Found:** User not found (bilingual message)
- **Example Response:**

```
{
  "status": "success",
  "data": {
    "user": {
      "id": "user_id",
      "firstname": "John",
      "lastname": "Doe",
      "phone": "+1234567890",
      "isEmailVerified": true,
      "isPhoneVerified": false
    }
  }
}
```

```
    }  
  },  
  "message": {  
    "en": "Phone unverified successfully",  
    "ar": "تم إلغاء التحقق من الهاتف بنجاح"  
  }  
}
```

## Verification Management Features

The admin verification management system provides comprehensive control over user verification status:

### Email Verification:

- **Verify Email:** Manually mark a user's email as verified
- **Unverify Email:** Remove email verification status
- **Validation:** Prevents duplicate verification or unverification of already unverified emails

### Phone Verification:

- **Verify Phone:** Manually mark a user's phone as verified
- **Unverify Phone:** Remove phone verification status
- **Validation:**
  - Prevents verification if user has no phone number
  - Prevents duplicate verification or unverification of already unverified phones

### Security Features:

- **Admin or Magnet Employee:** All verification endpoints require admin or magnet\_employee authentication
- **Audit Trail:** All verification changes are tracked with timestamps
- **Bilingual Support:** All responses include English and Arabic messages
- **Error Handling:** Comprehensive validation with appropriate error messages

### Use Cases:

- **Manual Verification:** Admins can verify users who completed verification through other means
- **Account Recovery:** Help users regain access by re-verifying their contact information
- **Security Management:** Unverify suspicious accounts for security review
- **Compliance:** Ensure verification status meets regulatory requirements

## Admin User Object

- **id** (ObjectId)
- **firstname** (string)
- **lastname** (string)
- **email** (string)
- **phone** (string, optional)
- **role** (string, enum: 'admin', 'magnet\_employee', 'business', 'customer')
- **country** (string)

- **language** (string, enum: 'en', 'ar')
  - **imageUrl** (string, optional)
  - **isEmailVerified** (boolean)
  - **isPhoneVerified** (boolean)
  - **isDisallowed** (boolean)
  - **disallowReason** (string, if disallowed)
  - **disallowedBy** (object, populated with admin details who disallowed)
  - **disallowedAt** (Date, if disallowed)
  - **allowedBy** (object, populated with admin details who allowed)
  - **allowedAt** (Date, if allowed)
  - **businessInfo** (object, for business users)
    - **crNumber** (string)
    - **vatNumber** (string)
    - **companyName** (string)
    - **companyType** (string)
    - **city** (string)
    - **district** (string)
    - **streetName** (string)
    - **isApproved** (boolean)
    - **approvalStatus** (string, enum: 'pending', 'approved', 'rejected')
    - **approvedBy** (object, populated with admin details who approved)
    - **approvedAt** (Date)
    - **rejectionReason** (string, if rejected)
  - **createdAt** (Date)
  - **updatedAt** (Date)
- 

## Admin Wishlist Management Routes

### 1. Get All Wishlists

- **GET** `/api/admin/wishlists`
- **Description:** Get all wishlists with pagination and filtering capabilities.
- **Headers:** `Authorization: Bearer <token>`
- **Query Parameters:**
  - **page** (number, optional, default: 1)
  - **limit** (number, optional, default: 10)
  - **userId** (string, optional, filter by user ID)
  - **productId** (string, optional, filter by product ID)
- **Response:**
  - **200 OK:** List of wishlists with pagination info (bilingual message)
  - **Example Response:**

```
{
  "status": "success",
  "data": {
    "wishlists": [
```

```
{
  "id": "wishlist_id",
  "user": {
    "id": "user_id",
    "firstname": "John",
    "lastname": "Doe",
    "email": "john@example.com",
    "role": "customer"
  },
  "products": [
    {
      "id": "product_id",
      "name": "Product Name",
      "code": "PROD001",
      "status": "approved"
    }
  ],
  "createdAt": "2024-01-01T00:00:00.000Z"
}
],
"pagination": {
  "currentPage": 1,
  "totalPages": 1,
  "totalItems": 1,
  "itemsPerPage": 10
}
}
```

## 2. Get Wishlist by ID

- **GET** `/api/admin/wishlists/:id`
- **Description:** Get detailed information about a specific wishlist.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Wishlist details (bilingual message)
  - **404 Not Found:** Wishlist not found (bilingual message)

## 3. Create Wishlist

- **POST** `/api/admin/wishlists`
- **Description:** Add a product to a user's wishlist (creates wishlist if it doesn't exist).
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `userId` (string, required) - User ID
  - `productId` (string, required) - Product ID (must be approved)
- **Response:**
  - **201 Created:** Product added to wishlist successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)

## 4. Update Wishlist

- **PUT** `/api/admin/wishlists/:id`
- **Description:** Update wishlist information or add/remove products.
- **Headers:** `Authorization: Bearer <token>`
- **Body:**
  - `userId` (string, optional) - New user ID
  - `productId` (string, optional) - Product ID to add or remove
  - `action` (string, optional, enum: 'add', 'remove') - Action to perform on product
- **Response:**
  - **200 OK:** Wishlist updated successfully (bilingual message)
  - **404 Not Found:** Wishlist not found (bilingual message)

## 5. Delete Wishlist

- **DELETE** `/api/admin/wishlists/:id`
  - **Description:** Permanently delete a wishlist entry.
  - **Headers:** `Authorization: Bearer <token>`
  - **Response:**
    - **200 OK:** Wishlist deleted successfully (bilingual message)
    - **404 Not Found:** Wishlist not found (bilingual message)
- 

# Admin Review Management Routes

## 1. Get All Reviews

- **GET** `/api/admin/reviews`
- **Description:** Get all reviews with pagination and filtering capabilities.
- **Headers:** `Authorization: Bearer <token>`
- **Query Parameters:**
  - `page` (number, optional, default: 1)
  - `limit` (number, optional, default: 10)
  - `userId` (string, optional, filter by user ID)
  - `productId` (string, optional, filter by product ID)
  - `rating` (number, optional, filter by rating)
- **Response:**
  - **200 OK:** List of reviews with pagination info (bilingual message)

## 2. Get Review by ID

- **GET** `/api/admin/reviews/:id`
- **Description:** Get detailed information about a specific review.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Review details (bilingual message)
  - **404 Not Found:** Review not found (bilingual message)

## 3. Create Review

- **POST** /api/admin/reviews
- **Description:** Create a new review for any user and product.
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **userId** (string, required) - User ID
  - **productId** (string, required) - Product ID (must be approved)
  - **rating** (number, required, min: 1, max: 5) - Rating
  - **comment** (string, optional) - Review comment
- **Response:**
  - **201 Created:** Review created successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)

#### 4. Update Review

- **PUT** /api/admin/reviews/:id
- **Description:** Update review information.
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **rating** (number, optional, min: 1, max: 5) - New rating
  - **comment** (string, optional) - New comment
- **Response:**
  - **200 OK:** Review updated successfully (bilingual message)
  - **404 Not Found:** Review not found (bilingual message)

#### 5. Delete Review

- **DELETE** /api/admin/reviews/:id
- **Description:** Permanently delete a review.
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - **200 OK:** Review deleted successfully (bilingual message)
  - **404 Not Found:** Review not found (bilingual message)

#### 6. Reject Review

- **PUT** /api/admin/reviews/:id/reject
- **Description:** Reject a review and send email notification to the reviewer.
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **reason** (string, required) - Reason for rejecting the review
- **Response:**
  - **200 OK:** Review rejected successfully (bilingual message)
  - **400 Bad Request:** Review already rejected or missing rejection reason (bilingual message)
  - **404 Not Found:** Review not found (bilingual message)
- **Features:**
  - **Email Notification:** Automatically sends email to the reviewer informing them of the rejection
  - **Status Tracking:** Updates review status to 'reject' and tracks rejection details
  - **Audit Trail:** Records who rejected the review, when, and why

- **Validation:** Prevents rejecting already rejected reviews
- **Example Response:**

```
{
  "status": "success",
  "data": {
    "review": {
      "id": "review_id",
      "user": {
        "id": "user_id",
        "firstname": "John",
        "lastname": "Doe",
        "email": "john@example.com"
      },
      "product": {
        "id": "product_id",
        "name": "Product Name"
      },
      "rating": 4,
      "comment": "Great product!",
      "status": "reject",
      "rejectedBy": {
        "id": "admin_id",
        "firstname": "Admin",
        "lastname": "User",
        "email": "admin@example.com",
        "role": "admin"
      },
      "rejectedAt": "2024-01-01T12:00:00.000Z",
      "rejectionReason": "Inappropriate content",
      "createdAt": "2024-01-01T10:00:00.000Z"
    },
    "message": {
      "en": "Review rejected successfully",
      "ar": "تم رفض التقييم بنجاح"
    }
  }
}
```

---

## Admin Address Management Routes

### 1. Get All Addresses

- **GET** `/api/admin/addresses`
- **Description:** Get all addresses with pagination and filtering capabilities.
- **Headers:** `Authorization: Bearer <token>`
- **Query Parameters:**
  - `page` (number, optional, default: 1)
  - `limit` (number, optional, default: 10)



- **userId** (string, optional, filter by user ID)
- **city** (string, optional, search by city)
- **country** (string, optional, search by country)
- **Response:**
  - **200 OK:** List of addresses with pagination info (bilingual message)

## 2. Get Address by ID

- **GET** `/api/admin/addresses/:id`
- **Description:** Get detailed information about a specific address.
- **Headers:** **Authorization:** **Bearer** `<token>`
- **Response:**
  - **200 OK:** Address details (bilingual message)
  - **404 Not Found:** Address not found (bilingual message)

## 3. Create Address

- **POST** `/api/admin/addresses`
- **Description:** Create a new address for any user.
- **Headers:** **Authorization:** **Bearer** `<token>`
- **Body:**
  - **userId** (string, required) - User ID
  - **addressLine1** (string, required) - Primary address line
  - **addressLine2** (string, optional) - Secondary address line
  - **city** (string, required) - City
  - **state** (string, required) - State/Province
  - **postalCode** (string, required) - Postal code
  - **country** (string, required) - Country
- **Response:**
  - **201 Created:** Address created successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)

## 4. Update Address

- **PUT** `/api/admin/addresses/:id`
- **Description:** Update address information.
- **Headers:** **Authorization:** **Bearer** `<token>`
- **Body:**
  - **addressLine1** (string, optional) - Primary address line
  - **addressLine2** (string, optional) - Secondary address line
  - **city** (string, optional) - City
  - **state** (string, optional) - State/Province
  - **postalCode** (string, optional) - Postal code
  - **country** (string, optional) - Country
- **Response:**
  - **200 OK:** Address updated successfully (bilingual message)
  - **404 Not Found:** Address not found (bilingual message)

## 5. Delete Address

- **DELETE** `/api/admin/addresses/:id`
  - **Description:** Permanently delete an address.
  - **Headers:** `Authorization: Bearer <token>`
  - **Response:**
    - **200 OK:** Address deleted successfully (bilingual message)
    - **404 Not Found:** Address not found (bilingual message)
- 

## Admin Order Management Routes

### 1. Get All Orders

- **GET** `/api/admin/orders`
- **Description:** Get all orders with pagination and filtering capabilities.
- **Headers:** `Authorization: Bearer <token>`
- **Query Parameters:**
  - **page** (number, optional, default: 1)
  - **limit** (number, optional, default: 10)
  - **customerName** (string, optional, search by customer name, email, or phone - supports partial matches and multiple search patterns)
  - **status** (string, optional, filter by order status)
  - **startDate** (string, optional, filter orders from date)
  - **endDate** (string, optional, filter orders to date)
- **Search Functionality:**
  - The **customerName** parameter performs a comprehensive search across:
    - Customer first name (exact match, contains, starts with, ends with)
    - Customer last name (exact match, contains, starts with, ends with)
    - Customer email address
    - Customer phone number
    - Full name (concatenated firstname + lastname)
  - Search is case-insensitive and supports partial matching
  - Examples: `?customerName=john` will find "John", "Johnny", "Johnson", etc.
- **Response:**
  - **200 OK:** List of orders with pagination info (bilingual message)

### 2. Get Order by ID

- **GET** `/api/admin/orders/:id`
- **Description:** Get detailed information about a specific order.
- **Headers:** `Authorization: Bearer <token>`
- **Response:**
  - **200 OK:** Order details (bilingual message)
  - **404 Not Found:** Order not found (bilingual message)

### 3. Create Order

- **POST** /api/admin/orders
- **Description:** Create a new order for any customer.
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **customerId** (string, required) - Customer ID
  - **items** (array, required) - Array of order items
    - Each item: { **product**: string, **quantity**: number }
  - **shippingAddressId** (string, required) - Shipping address ID
- **Response:**
  - **201 Created:** Order created successfully (bilingual message)
  - **400 Bad Request:** Validation errors (bilingual message)

#### 4. Update Order

- **PUT** /api/admin/orders/:id
- **Description:** Update order information including status.
- **Headers:** Authorization: Bearer <token>
- **Body:**
  - **items** (array, optional) - New order items
  - **shippingAddressId** (string, optional) - New shipping address ID
  - **status** (string, optional) - New order status
- **Response:**
  - **200 OK:** Order updated successfully (bilingual message)
  - **404 Not Found:** Order not found (bilingual message)

#### 5. Delete Order

- **DELETE** /api/admin/orders/:id
- **Description:** Permanently delete an order.
- **Headers:** Authorization: Bearer <token>
- **Response:**
  - **200 OK:** Order deleted successfully (bilingual message)
  - **404 Not Found:** Order not found (bilingual message)